From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: JerryK0DU@aol.com
Subject: [7947] .NEED QRP KIT INFO
Message-ID: <960430235250_387380274@emout09.mail.aol.com>

I am new to QRP and having lots of fun with my new Qrp Plus, however I would like some Info as to where I can buy these Qrp kits. I keep hearing about 49ers and sierras,nor cals
and others but have no Info on where I can come by some of these neat little rigs. Thanks, Jerry K0DU

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: bfollett@ditell.com
Subject: [7969] 30M & QRPTTF
Message-ID: <199605011623.KAA28881@orion.ditell.com>

Gang:

In reading this 30M debate, with the "classical" arguements, I am struck by the fact that many of the comments drifted almost totally away from the original question.

Which was, "where was everybody on 30M? I called CQ and..."

Bruce Farnworth, WU7F published the rules for the NorCal contest committee, and they cleary stated "All bands and multi-modes (SSB/FM and CW).

I read the rules, I listened on both 30M $ 17M, but being the hunt & pounce sort of guy, I gave up on those bands. To answer Paul's, NA5N, question, yes, I could have increased the number of contacts, as 30M was wide-open, and yes, I probably whould have been working the same contacts I made on 40M & 20M.

While Laura and others have re-enlightend us with the history of no-contests on WARC, it seems to me, the real issue is the NorCal contest committee decision. As far as I am concerned, any contest/activity/net/propagation study organizer(s) must make a value judgement based upon the amount of traffic generated, the duration of the event, etc., against the convention of "no contests on WARC". Thats why we have contest/event organizers...To Preston's point, if we call it a contest, then we invite other contests into WARC -- perhaps. But what if it is an "event", or, kind of like 3853kHz Southern Hate Mongers, "10110 to 10123kHz is the QRPer's domain -- all others stay the hell out". (Of course we don't have the 2KW linears and foul language to drive others away).

If a contest/event organizer allows use of WARC, use you own conscience to not operate there if their decision bothers you. -- Preston, complain to

Farnworth...:-)

In my opinion, I wish we would focus our efforts on getting more people on the air, any band, any time, any reason -- and yes, we need to discuss our feelings about WARC usage. The slogan "Use it or Loss it" couldn't be more relevant to QRP CW activities. In fact, we can't even use our "recommended" SSB calling frequencies on 40M & 20M because of Net operators who clearly feel they have squatting rights to a given frequency. Lets face it, the ARRL is promoting the move to digital, "to stay relevent". To preserve a large segment of 30M for CW, WE GOTTA USE IT.

73, Bob

Bob Follett WA7FCU, QRP-L # 129, NorCal, ARCI, 10-10
2861 Estates Dr. VOICE: 801.649.6457
Park City, UT 84060 Home Office E-mail: bfollett.ditell.com

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: JEVERHART@cayman.vf.mmc.com
Subject: [7972] 30M & QRPTTF
Message-ID: <960501125923.24a00574@carib.vf.mmc.com>

Gang,

OK, I promised to track down the source of the 30 meter listing under recommended frequencies. The answer came just as I was sending my last message to the list.

It seems there was a mailing earlier this year directly to various qrp clubs from Bob Farnworth. In it, 10.106 MHz showed up in the "recommended frequencies." Apparently this was a typo since the frequency list did *not* appear in the announcement printed subsequently in QRPp.

So I apologize for the confusion, guess I gotta stop reading things.

Now back to why nobody uses 80 meters during the day...

72/73,

Joe E., N2CX

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996

From: JEVERHART@cayman.vf.mmc.com
Subject: [7973] 30M & QRPTTF
Message-ID: <960501124743.24a00574@carib.vf.mmc.com>

Gang,

OK, I started this thread and now I gotta comment some more:

I agree that 30 and the other WARC bands should be off-limits to contest type activities. They are a safety valve maintained by IARU understanding an "gentle-person's" agreement to provide somewhere for the contest-weary to find respite.

I, too remember very clearly the history of the non-contesting when these bands became available. My confusion was brought about by a document I saw listing the QRPTTF rules that had 10.106 MHz listed among the recommended frequencies. I'm attempting to trace the origin of the document and will report my findings back to the group.

I appreciate the gentle-personly nature of the discussion about WARC frequencies and apologize if I caused any hard feelings by my opening the subject for discussion. It's one of those things that "everybody" knows, but nobody discusses. Now that the air has been cleared, it shouldn't recur until the 3 month collective memory resets itself and a newbie brings it up again :-).

72/73,

Joe E., N2CX

work: jeverhart@cayman.vf.mmc.com
home: N2CX@voicenet.com

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: cjl@mail09.mitre.org (Charles J. Ludinsky)
Subject: [7961] 40-9er filters
Message-ID: <960501094650.31932@mail09.0>

Does anyone have any guidelines for what filter component combinations make sense or are practical? That is, at what point do the "real" characteristics of inductors and capacitors (i.e., series/parallel resistances, capacitances, inductances, etc.) make calculated or simulated filter values invalid?

For example, the combination 1300pF-0.69uH-1300pF appears to offer

significant performance improvements (e.g., harmonic attenuation) over
the combination 470pF-1.5uH-470pF (actually, I think 1.2uH is more
appropriate). However, one can find other combinations that offer yet
again the same improvement over the first combination. An example is
the filter 10000pF-0.1uH-10000pF (actually 10230pF-0.1uH-10173pF),
 which shows at least another 10-20dB attenuation of the second harmonic
(while still maintaining 50 ohm to 50 ohm matching). I suspect, however, that
the currents in the latter become so high that the secondary parameters of the
real components begin to dominate.

Regards,
Chuck, N1RXT

> Date: Tue, 30 Apr 1996 11:41:31 PDT
> From: mizrahi@svlhp8.scs.philips.com
> Subject: [7917] Re: improved 40-9er filter

[text omitted]

> So, for the time being, let's declare it as the "king of filters"!!!
> Well, at least for the 3 element pi configuration...
>
> The simulation results are as follows:
> filter 1: 1300pF-0.68uH-1300pF (proposed by Mike)
> filter 2: 470pF-1.5uH - 470pF (see Alan Kaul's posting)
>

[text omitted]

> 2nd Harmonic Attenuation (dB from fundamental):
>
> Rs=50 Rs=65 Rs=100
>
> filter 1 -23 -24 -25
> filter 2 -13 -14 -16
>

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: "Brian Jones" <brian_jones@uk.ibm.com>
Subject: [7951] Browsing the digest
Message-ID: <199605010837.EAA105122@nss2.CC.Lehigh.EDU>

Browsing the Digest.

I get qrp-l daily in digest form. Does anyone know of any good tools which will allow me to jump from append to append and file those I want to keep for posterity. Currently I browse the file sequentially and cut & paste what I want to keep.

There must be a better way - don't tell me I'm going to have to program it!

Brian - G0UKB / KB8YKJ

Brian Jones
Java Technology Centre
HURSLEY MP 146 Ext 246896 (+44 1962 816896)
BEJONES AT WINVMD brian_jones@uk.ibm.com

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: NYOUNG@nova.wright.edu
Subject: [7992] Buncha stuff <> Dayton +c
Message-ID: <01I478B2Q09A8X2CL3@nova.wright.edu>

I read the two articles in the two different CQ issues about the "Micronauts." I thought that the idea was kinda neat, but when I got the March QRPp, I decided that the 49-er (or whatever) was neater, since I could put that board in just about anything. Today, for instance, I fashioned a banana out of a chunk of yellow computer packing foam. I have another chunk that I'm gonna use for my cellular phoam. As I was carving out the banana, it occured to me that a thread from a pre-Hamvention set of barely lucid exchanges last year had near, shall we say, come to fruition.

So here's my idea: I build a 49er (or whatever) on the regulation board, using regulation parts and I fix up a key with some old tv channel changer push-buttons and I put it all in a foam banana. Or maybe inside my cellular phoam. That way I could have the antenna wire coming out the top of the cellular phoam and have the battery hidden in the bottom of it. And I would just have to squeeze one end or something to key it.

I think that sounds a lot more sensible than a radio in a baggie. Remember, I suggested that one last year. Just before the catnip started to sprout. ANd then Bill Kelsey and Mike Czu*.* showed up at the QRP suite with some radios in little pill bottles. It was pretty neat, looking at those two little bottles, thinking of how nuts you'd have to be to take all that medication at once. Which reminds me....

When I first signed on to this list of loonies, I was trying to find info on a little QRP rig that was published back around 1975 in the now-defunct (and sadly missed) _Ham Radio_ magazine. One or other list loonie knew what I was talking about (ayee! two people, one sane and the other quite deranged, who understand each other!) and said that "yes," such a beast had existed once. Which comes right back to the 49er. Or whatever. I keep putting off ordering one, 'cause I'm really trying to save my cash in case Dave Benson shows up at Dayton with a SSB rig/kit, which I will immediately gobble up.

JUst think of it: a 49er (or whatever) in something besides an Altoids box. Like maybe in a cellular phoam. Yeah, that'd be cool. I could work cw mobile with it. Heh heh heh heh he.... heh heh he..... heh heh heh heh heh... Yeah, or something.... Heh heh heh

See ya in a couple weekends.... or whatever!

73
Nils
WB8IJN +c
>From the looks of things, this is gonna be a pretty neat deal. All them folks from somewhere besides Texas showin' up. Maybe even a couple of 'em sane and lucid, too. And no duct tape.

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Tony Drumm <tdrumm@sparc.isl.net>
Subject: [7953] Cascade availability
Message-ID: <318757E5.C56@sparc.isl.net>

Can someone in the know tell me if there are any Cascade kits remaining and, if so, the total price? I was trying to get to the NorCal home page last night and this morning with no luck...

72.
--
Tony Drumm
Rochester, MN
internet: tdrumm@isl.net
Packet: aa0sm@wd0gnk.#semn.mn.usa.na

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996

From: Brian Cieslak <bcieslak@merge.com>
Subject: [7967] Cheap 2M CW/SSB - some progress
Message-ID: <199605011553.KAA26390@world.merge.com>

I posted a message a few days ago requesting info on converting a MFJ or Ramsey 2M receiver kit to receive SSB or CW too. Here's what I found so far, not much but food for thought.

The MFJ kit uses the motorola MC13135 FM receiver on a chip. It has two LO's and mixer that feed a limiter and a detector for FM reception. There is a pin that allows you to tap into the signal before it gets conditioned for FM demodulation (Limiter and Detector). I suspect you should beable to feed the signal at this point to an NE602 set up as a BFO to get SSB and CW out (or AM for that matter).

Am I on the right track hardware guru's (Wayne, Chuck)? If so, Can someone teach me how to design an NE602 as a BFO stage say around 455 KHz.

Brian AE9K
bcieslak@merge.com

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Clark Savage Turner WA3JPG <turner@safety.ics.uci.edu>
Subject: [7963] Found Roy, thanks!
Message-ID: <2081.830960702@safety.ics.uci.edu>

Roy answered my mail. Love this list. Thanks to all for the hints and information.

Clark
WA3JPG

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: bachmann@ari.net
Subject: [7999] Frequency Counter Calibration
Message-ID: <199605020014.UAA07079@mtolympus.ari.net>

Good Evening,

 There is an interesting circuit in the April 1996 issue of RF Design on page 102 entitled "Simple Direct-Conversion Receiver Checks Frequency Counters". I'll give it a shot when I get some of my other half-finished projects completed. It uses a 10.7 Mhz FM radio IF

transformer on the input to a NE602 for the WWV receive signal and mixes it with the 10 Mhz oscillator (used as an LO) from the frequency counter. There is an adjustment to attenuate the LO from the counter to get somewhat of a balance into the NE602. The output of the NE602 is put into a differential amp (LM386) which drives a speaker. You tweek (or is that tweak?) the trimmer on the 10 Mhz in the counter to zero beat with WWV. When you get near zero beat, you can use an O-scope on the output of the LM386 to do the fine adjustment. I suspect that you could use an analog dc voltmeter for the final adjustment when the frequency gets real low. The FAR circuit board for the Neophyte receiver can be used (with some modification).

73, Rich Bachmann
N3SLR

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: w6zh@ix.netcom.com (H. Hoover III)
Subject: [7977] G-QRP/Sprat Info
Message-ID: <199605011740.KAA10317@dfw-ix6.ix.netcom.com>

Greetings all:

For those that are members of the G-QRP Club (and those that are not, you should be) and have questions about your Sprat subscription, you can contact the subscription meister, Dave Aizlewood, G4WZV, at 101746.3113@compuserve.com .

de Pete, W6ZH, QRPL #257

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: scicior@cp.uswc.uswest.com (Steve Ciciora)
Subject: [7989] Hamstick dipoles on 40m
Message-ID: <9605012034.AA21427@sp5-316.nts.uswest.com>

Due to me signing away my rights to a real antenna when I bought my house, I have limited space to hide one. Since it is possible (not ideal) to make contacts with a hamstick on a car, I bought one for my backyard. Talking to the guy at HRO, he said the problem with putting two of them together for a dipole is that you would want it at least 1/4 wavelength high. Did he mean for horizontal dipoles as well as vertical dipoles, or just horizontal? Since a vertical with a good ground plane dosn't need to be up high, what is the difference between a vertical with a ground plane and a vertical dipole with one end just off the gound? I guess I could spend another $20 and find

out...
 Also, with gound planes, should they be burried? At least half of mine will have to be. Should I use insulated or bare wire? I plan on putting in as many ground counterposes as possible (at least 6-8) each about 1/4 wavelength long. They will not be able to run straight out from the antenna, though.
Thanks for your time,
-Steven Ciciora KB0PJF

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [7948] IC-706 at Riley
Message-ID: <199605010440.EAA03079@chuck.dallas.sgi.com>

Gang,

Several have commented that they heard me and called
me while I was K5FO/5 Riley NM.

One thing that the IC-706 did not have was a CW filter.
Sometimes I had several call me and I picked one. It
was sometimes difficult and I sincerely apologize if
I missed you.

We did an A - B test between a 200' long wire and the
vertical and the vertical won every time. May have
been all the minerals and the buried $500,000 in
gold that effected the long wire. This was after
we lost the kite. Did we mention the wind? I thought
we had. :-)

All of us tried to work everyone. There was quite
a bit of activity as noted by others.

Next year we have a special treat in store for
everyone. So figure out new antennas and new rigs
to work several special sites. Sorry, maybe in
Sept for the NE-QRP event.

Be sure to send in the logs. Every contact and
every log counts.

dit dit
--
Chuck Adams (K5FO CP-60) adams@sgi.com
K5FO TMPS 1996 Qs=004 States=04 Confirmed=00 DX=00

CO AZ MI SD

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: David Johnson <djohnson@acpub.duke.edu>
Subject: [7996] Info on 49er now on KL Web Pages
Message-ID: <Pine.SOL.3.91.960501175720.23151A-100000@bio7.acpub.duke.edu>

Greetings all KnightLites!

I sure hope each and every one of you is doin' fine!

The QRP netters have been having a great time on 3710 kHz on Sunday nights - please join us if you haven't been pounding some brass on the Round Table!

I want to announce the addition of some handy helps in your efforts to construct the 49er. This rig is a simple 40m transceiver designed by Wayne Burdick of NorCal. I have added a schematic, pcb layout, and parts arrangement diagram, onto the KnightLite Technical Projects Page. This is courtesy of kind permission from Wayne, and help with the graphics from Gary, N3GO.

As usual, access the KnightLite Home Page (and the other associated pages) from:

http://www.duke.edu/~djohnson/

Get those soldering irons warmed up, and let the scrounging and building begin!

I hope to have a great QSO with YOU soon, 2-way QRP with 49ers on each end !!!

72,

Dave

David W. Johnson, Ph.D.
Amateur Radio Extra WA4NID
email: djohnson@acpub.duke.edu
packet: WA4NID@KB4WGA.#DUR.NC.USA.NOAM

QRP ARCI 6546
G-QRP 4864
NorCal 355
TSRAC 3482

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: KFGlynn@aol.com
Subject: [7965] Latest issue of 73???
Message-ID: <960501104107_104265598@emout12.mail.aol.com>

Hi gang,

I bought the latest issue of 73 but did not see articles by Jeff AC4HF and
Rob WA3ULH???

73 Kevin KB2TEO

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: "Jim Markle" <jim_markle@corp.disney.com>
Subject: [7980] LED Indicators for tuners?
Message-ID: <9604018309.AA830972876@ccunix1.disney.com>

> I zipped the article down to a 120k "Word 6 for Windows" compatible
> file complete with graphics, etc that is easily emailed if anyone
> wants it.
>
> Email me direct if you want it and I'll gladly send a the file to
> you.....
>
> (It's really a neat little accessory.)
>
> kb5ob Van Nuys

_____ Reply Separator _____
Subject: RE: LED Indicators for tuners?
Author: adams@chuck.dallas.sgi.com at CORP-INTERNET-BURBANK
From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Mike Czuhajewski <wa8mcq@u1.abs.net>
Subject: [7952] More 40-9er filter talk
Message-ID: <Pine.BSI.3.91.960501074859.17540B-100000@u1.abs.net>

Alright, that's it! I've been sitting on this posting for many weeks,
shared it privately with several people but still don't consider it
"ready for prime time"; still needs some work, corrections, etc, but I
think it's time to get this on the streets anyhow and do the corrections
later. One of the main problems is in the initial filters where I talk
about the ones done from the Bowick and Hayward tables; I then go on to

design a few variations on those, and some ofthe component values are way out in left field, ie, do NOT give the results I said. I obviously messed up on the computer somewhere and am generating new data that DOES compute. There may be some other errors elsewhere, too, and not everything will "compute" if you try reproducing my data on your analysis programs, but at least it gets the general idea across about passband ripple, response, etc.

This starts out with a few paragraphs of disclaimers that I tacked on when I sent it to Alan Kaul some weeks ago. I'll eventually post a corrected version. Remember to take some of the early example values with a little bit of salt and don't be surprised if you run the values and they don't always perform like I said they did :-) 73 and Queue Our Pea DE WA8MCQ

Alan--Here's the draft posting I wrote some weeks ago but still haven't sent out. It's for your amusement, not necessarily for posting, as I'm in one of my revision cycles again, and only part way thru that--things may be a bit chopped up, out of sequence, inconsistent, etc, but at least you get the general idea of what's going on, re passband ripple, harmonic attenuation, etc.

As originally written, I went on and on about second harmonic attenuation, but then last week I suddenly remembered some facts of life that I've seen repeatedly on spectrum analyzer screens, on several QRP rigs and on square wave computer clock oscillator cans, ie, the third harmonic will be stronger than second, fifth stronger than 4th, etc. I went back a year or so in the QRP Quarterly to find some photos I published in the Idea Exchange of filtered and unfiltered output from a QRP rig to get some specific values; 2Fo was down about 16 dB, as I recall, while 3Fo was only 12 dB down, without filter. (A pure square wave will have NO even order harmonics, but we don't live in a perfect world, and so even the square wave computer cans had even harmonics, but well below the odd order ones.)

As originally written, I had said that the second harmonic was about ten dB down from the fundamental as a general rule of thumb, but last week I remembered it was the THIRD that was that far down, with the second being somewhat below that. I haven't completely written that change into the text. But still the basic principle is that you want good, steep attenuation so that the second harmonic is as far down as you can get it, and the higher harmonics will fall into place, AND you need minimal insertion loss!

By the way, you DO need a Chebyshev response--a Butterworth is nowhere near as good, as the slope is much shallower, ie, second harmonic suppression is nothing to write home about. A Butterworth

is essentially a Chebyshev with zero passband ripple, by the way. For some reason, DeMaw seems enamored of the Butterworth designs in some of his articles. They do give beautifully smooth passband response, but as Hayward pointed out in his Ham Radio article on ultraspherical filters (peaked low pass) circa 1984, when we use filters on the output we want to pass that output and don't care about lower frequencies: passband ripple is of no concern, as long as we have our signal at a high point of that ripple.

Anyhow, here's the unposted, draft article for your amusement....

73 and Queue Our Pea DE WA8MCQ wa8mcq@abs.net

Regarding harmonics on the 40-9er, a couple weeks back someone mentioned having a couple of filter designs on paper, based on the tables in the Bowick RF book; they were 3 element, Chebyshev response, and I believe 0.1 and 0.5 dB passband ripple. As I recall, he said he didn't know what sort of harmonic suppression they would have. Here are some paper designs of my own, using filter tables and computer software, along with computer analysis of them, to give you some idea of what can be accomplished with a filter of only 3 elements.

I couldn't find the posting again to analyze his specific values, so I designed a few on my own using the Bowick book as well as W7ZOIs Introduction to RF Design. Both have tables for filter design, but they are "normalized"--the data for the inductors and capacitors is given for a filter of 1 radian per second and 1 ohm, so you can scale it to any frequency and impedance easily. You choose the type of response you want, impedance, the number of elements and cutoff frequency, then plug the values from the appropriate table into simple formulas to convert them to 50 ohms and whatever frequency you want.

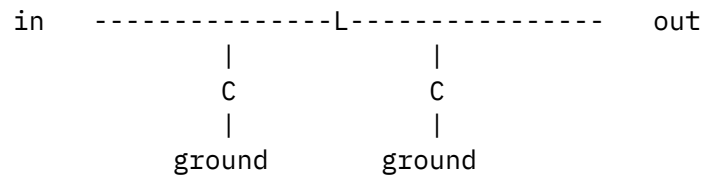
(Note--if you compare the Bowick and Hayward tables, you will find that they do NOT agree with each other, although Haywards tables agree with the "filter Bible", written by Zverev. The difference is that the Zverev/Hayward tables are for predistorted filters, while Bowicks are not. Predistorted filter tables take the "real life" Q of inductors into account, while non-predistorted tables assume infinite Q.)

For filter analysis I use the GPLA (General Purpose Ladder Analysis) program which is on the disk that comes with the ARRL version of

W7ZOIs book. It's very handy and easy to use, and gives both graphical and tabular outputs. To design more filters, without having to resort to the tedium of filter tables, and to get greater flexibility, I use Filter Design System by Bob Lombardi, WB4EHS. It's available in the "tools" section of the ftp area at lehigh.edu; there are two versions there--use the latest one, which I believe is called FDS200A.zip or some such. I refer to this as FDS later.

Some basics--FCC spectral purity requirements are that all spurious signals, including harmonics, must be at least 30 dB below the fundamental if running 5 watts or less. (Over 5 watts, it becomes 40 dB below.) For typical QRP rigs, with a single transistor running in Class C, a good rule of thumb appears to be that the unfiltered signal has a third harmonic about ten dB below the fundamental. There's probably a mathematical proof for the precise value, but that's waaaay beyond me. I base this figure on past observation of several rigs on high quality spectrum analyzers--a Ramsey 40M transmitter, NorCal 40 and 40A, and an ARK-4 from S&S Engineering. The second harmonic will, perhaps surprisingly, be somewhat weaker than the third, and the 4th will be less than the 5th, but there's a good mathematical basis for that (which is beyond the scope of this posting, and frankly beyond me as well!). That means that we would typically want a low pass filter to have at least 20 dB of attenuation at the third harmonic to be "street legal", and not too much less than that at the second harmonic.

I'll confine the discussion to 3 element filters this time. Here's the topology--



We'll assume that the input and output are both 50 ohms, which makes both values of C equal and simplifies things when switching back and forth between FDS and GPLA. When designing a filter, FDS spits out a list of components which has the generator or source end at the top and the load end at the bottom. GPLA is upside down--it has the load end at the top and source at the bottom. If your filter has equal input and output impedances, the entire list of values is symmetrical and can be inverted without problem, but if input and output are different, then the values are no longer symmetrical--the input and output capacitors will be of different values. If you run the values through GPLA "upside down" you'll get misleading results.

(Unfortunately, the two programs do not share any common file formats which would let you transport values directly between them; you must type them in manually, but it's not a big deal.)

A necessary factor to consider in filter design is passband ripple--the insertion loss of a filter will vary up and down as you go from 0 MHz up to the cutoff frequency, at which point it will start dropping off continuously. The amount of variation is usually specified in decibels (dB). For instance, with a ripple of 3 dB, as you go up from 0 toward the cutoff frequency the insertion loss will increase from almost 0 to 3 dB, decrease to some value fairly close to 0, then start increasing again.

With lower passband ripple, this variation is reduced and you have a nice, relatively flat response up to the cutoff frequency--but the slope beyond that isn't too sharp, and attenuation of the 2nd harmonic isn't all that great. Increase the passband ripple and you get a sharper slope and better 2nd harmonic attenuation. (There's a tabular chart further down that shows this for a variety of ripple values.)

But is increased insertion loss at some points between 0 MHz and the cutoff frequency a problem? Not necessarily. As W7ZOI said in a Ham Radio article years ago, hams don't usually require true low pass response--we normally want a low pass filter to pass a transmitted signal and cut off its harmonics. We want to pass 7 MHz energy, sharply reduce the energy at 14, 21, etc, but we don't care what amount of loss it may happen to have at, say, 4 or 6 MHz--we just want it to be low at 7 MHz and don't care about frequencies below that. That means we can get by with increased passband ripple and enjoy the benefit of better harmonic attenuation.

The down side is that component values become more critical and you could end up having to tune the filter for minimum insertion loss at 7 MHz. (You also come up with odd values of capacitors, though you can get around that to some extent by measuring the actual value of several capacitors and using the ones that come closest to the necessary value. Inductors are no problem--simply squeeze or spread the turns as needed.)

What we want is for our transmit signal to be at that point where the loss has decreased from, say, 3 dB back to almost 0, so we get the most possible signal through the filter. Careful design of the filter lets us hit that point easily. By going back and forth between FDS and GPLA a few times, varying the cutoff frequency each time around, you can quickly get a set of component values that puts that point of lowest loss right where your signal is.

Here's a 1 dB passband ripple, 3 element, Chebyshev response filter with cutoff of 7.5 MHz, designed from the Bowick tables: both values of C are 941 pF and L is 0.975 uH. Using the Hayward tables for the same filter, we get C = 859 pF and L = 1.055 uH.

Filter source	Loss at 7 MHz	Loss at 14 MHz	Loss at 21 MHz	Lowest loss
Bowick	1.45 dB	23 dB		5.9 MHz (0.06 dB)
Hayward	0.3	20.3		6.4 MHz (0.06)

(1.45 dB = 28%; 0.3 dB = 7%; 0.06 dB = 1.4%)

The Hayward filter has lower loss at 7 MHz, and acceptable (barely) performance at the second harmonic. The Bowick filter is more than adequate at 14 MHz, but decidedly excessive insertion loss. (Remember, the difference between the two tables used to derive these filters is that one is predistorted and the other is not.)

Since the Bowick filter, designed with a cutoff of 7.5 MHz, has lowest insertion loss at 5.9 MHz, I went to FDS to design one with a higher cutoff, to push that low point higher in frequency. I tried 8.5 MHz, giving C = 830 pF and L = 1.019 uH. Now the insertion loss at 7 MHz is 0.12 dB or about 2.7%, a reasonable value, though the 14 MHz response has dropped to 19.3 dB. The lowest insertion loss is now at 6.7 MHz, so we bump the cutoff up to 8.8 MHz (C = 802 pF and L = 0.984 uH); this lowers the 7 MHz insertion loss to 0.06 dB, and 14 MHz drops to 18.2 dB. We must balance harmonic suppression against the amount of fundamental signal energy we are willing to lose.

As noted before, all of these capacitor values are "off the beaten track", though you can take several capacitors with marked values close to the required value, and carefully choose the best ones with a capacitance meter. After all, a garden variety 10% silver mica marked for 820 pF could fall anywhere between 738 and 902 pF. You could also parallel two smaller capacitors to get the proper net value, something I do sometimes when space is not at a premium and capacitors are plentiful. Inductors are less of a problem. Simply wind them to a nearby value, using the formulas for inductance, and compress or expand the windings to get closer to the proper value. You could do this with an inductance meter of some sort, or simply manipulate them while in the circuit for maximum power output.

The filters above were designed for 1 dB of passband ripple. What happens if we go for more, like 3 dB? The ripple in the passband increases substantially--but we don't care about that as long as we fine tune the design so our signal is at a low loss point of the

response--and the attenuation slope gets better, ie, the attenuation at 14 MHz is greater.

Using FDS again, with 3 dB ripple and a cutoff of 8 MHz, we get C = 1332 pF and L = 0.708 uH. This gives 7 MHz insertion loss of 0.12 dB (2.7%) and 24 dB attenuation at 14 MHz--definitely a good, safe figure. The lowest loss is at 6.9 MHz; bumping it up a bit to 8.1 MHz cutoff gives C = 1316 pF and L = 0.699 uH, for 0.1 dB at 7 MHz and 14 MHz drops a hair to 23.8 dB.

What effect do the capacitors have? The nominal value is 1316 pf; let's vary both caps to 1200 pF and to 1400 pf while keeping the inductance fixed at 0.699 uH:

C	Loss at 7 MHz	Loss at 14 MHz	Lowest loss
1200	0.24 dB	21.9 dB	7.3 MHz (0.1 dB)
1316	0.10	23.8	7.1
1400	0.20	25.0	6.8

Here's a comparison of the responses of 3 element Chebyshev filters, 8 MHz cutoff frequency, with 0.1, 1 and 3 dB passband ripple:

Freq	0.1 dB	1 dB	3 dB	Butterworth
0	0	0	0	0
0.2	0	.01	.02	0
0.4	0	.03	.1	0
0.6	.01	.06	.21	0
0.8	.01	.1	.36	0
1.0	.02	.15	.55	0
1.2	.02	.21	.76	.01
1.4	.03	.28	.98	.01
1.6	.04	.35	1.21	.01
1.8	.04	.43	1.45	.01
2.0	.05	.51	1.68	.01
2.2	.06	.58	1.9	.01
2.4	.07	.66	2.11	.01
2.6	.08	.73	2.3	.02
2.8	.08	.80	2.48	.02
3.0	.09	.86	2.63	.03
3.2	.1	.91	2.76	.03
3.4	.1	.95	2.87	.04
3.6	.11	.98	2.95	.05
3.8	.11	1.01	2.99	.07

4.0	.11	1.01	3.01	.09
4.2	.11	1.01	3.0	.11
4.4	.11	.99	2.95	.14
4.6	.11	.96	2.86	.18
4.8	.1	.91	2.74	.22
5.0	.1	.85	2.58	.28
5.2	.09	.77	2.39	.35
5.4	.08	.69	2.15	.42
5.6	.07	.59	1.88	.51
5.8	.06	.49	1.57	.62
6.0	.06	.38	1.24	.75
6.2	.05	.28	.9	.89
6.4	.04	.19	.58	1.05
6.6	.03	.11	.3	1.23
6.8	.03	.07	.13	1.43
7.0	.03	.07	.12	1.65
7.2	.04	.12	.3	1.89
8	.14	1.06	3.07	3.04
9	.56	3.83	8.06	4.84
10	1.45	7.23	12.4	6.85
11	2.86	10.5	16	8.92
12	4.62	13.43	19	10.95
13	6.56	16	21.8	12.9
14	8.52	18.4	24.2	14.7
15	10.4	20.5	26.3	16.5

BUTTERWORTH VS. CHEBYSHEV

You'll sometimes hear about Butterworth filters. They have their places, but that's something we do NOT want in a transmitting low pass filter. The Chebyshev has passband ripple but good harmonic attenuation. The Butterworth has nice, flat ripple but poorer rolloff on the high end, making it quite unsuitable for a low pass filter. (In fact, a Butterworth is essentially the same as a 0 dB ripple Chebyshev.) I included an 8 MHz cutoff Butterworth above for comparison. Note that there is no ripple in the passband below the cutoff--it has a nice, smooth rise with no peaks and valleys. However, the insertion loss at 7 MHz in this example is a hefty 1.65 dB (31%), and the second harmonic is only 14.7 dB down.

All of the above relates to simple, 3 element filters. You can expect much better performance from 5 elements, and even get away with less passband ripple. A similar examination of 5 element filters is beyond the scope of this posting, which is already much too long, but here are some free samples: a 5 element Chebyshev with 1 dB of passband ripple, cutoff frequency 7.5 MHz, has insertion loss of about .2 dB at 7 MHz (under 5%) and the response at 14 MHz is 41.8

dB down! Add that to a final amp which has the second harmonic down by 10 dB and the final output has a second harmonic 51.8 dB below the fundamental, beating the FCC requirement by a long shot. Make that a 0.1 dB ripple filter, and the insertion loss is 0.1 dB, and the 14 MHz response is still 31 dB down (for a transmitted signal with second harmonic down by 41 dB).

The moral of the story is that simple filters, ie, 3 elements, can give reasonably good performance if you're willing to put some time and effort into them, but it does take some work. You can build a stock design with standard value capacitors, grabbing the nearest ones with the proper value stamped on them, wind the toroid with the specified number of turns on a randomly selected core of the proper type, and it will work--sort of. It may suffer from more insertion loss at the transmit frequency than you would like, and it may also have less harmonic suppression than desirable. But really good performance requires careful design and proper selection of components. Five element Chebyshev filters can be more forgiving, but that's another posting.

I'm going to write up an article for the QRP Quarterly one of these days, based on this, but that one will include some real graphics (response curves), not just tabular data, which makes things easier to visualize. In the meantime, I don't pretend to be the Ultimate Authority on Filters--if anyone sees any serious errors in my data or methodology or assumptions, I'm more than willing to listen and negotiate, and publicly eat crow where necessary :-) As Bob Pease says, "Comments invited!"

73 and Queue Our Pea DE WA8MCQ wa8mcq@abs.net

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: JayMiller@aol.com
Subject: [7997] NE QRP AField Sept. 21, 1996, A Theme ??
Message-ID: <960501193854_285108376@emout17.mail.aol.com>

Dear Fellow QRP Enthusists,

 For the NorCal "QRP To The Field", '96, the theme was "Ghost Towns" or "Historical Places", for the NorCal "QRP To The Field", '97, the suggested theme is "Alledged UFO Crash & Landing Sites, or other strange or mystical places" (Most of California qualifies in one or both of those categories, anyone who can elect Feinstein to Office is strange, but I am off the subject ;-))

So, what if we had a theme, for the Sept. 21, 1996 New England QRP AField event ? Now what does New England have, besides Kennedy's, Socialism, Liberals, & Taxes, that would be fun ? I will toss this out for open discussion (thread) to those on the QRP-L. I have a few ideas, but I don't want to bias the thread. Since most of the Members, in the New England QRP Club, are from New England, let's hear from 'all-y'all, oops, excuse me, Youse Guys. Let's put the dater (data) enroot (enroute elsewhere in the USA) to the QRP-L. This Reflector thread is open for discussion. Geez, if this were the Nevada QRP Club, it would prairie dogs & bordellos, except in Clark County, Nevada.

Remember, it has to be FUN. Monte is the Nevada QRP Club chartered yet ? :-)

72...Jay, WA5WHN (Wind blasted)
Albuquerque, New Mexico, USA.

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: us029806@interramp.com (Joe LeKostaj)
Subject: [7995] NEIQS meeting?
Message-ID: <v01520d04adada8a2f6f6@[38.14.103.59]>

Any members of the Northeast Illinois QRP Society out there? If so, could someone confirm if there's a meeting Thursday May 2, and where it's at. Thanks.

73,
Joe - WB9GOJ

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: art.searle@asb.com
Subject: [7976] No Contesting on WARC
Message-ID: <9605011349.0JFC800@asb.com>

Subject: No contesting on WARC bands, please

Preston WJ2V <pdouglas12@aol.com> writes:

>Hi guys,

> I am surprised and concerned that there was contest operating reported on
>30m by participants in NC's to the Field. Concentrated competition (one or
>two days of contest style exchanges, whatever you call the activity) does not
>belong on the WARC bands (that includes 30m). This is by long standing and
>generally accepted gentlepersons' agreement. This agreement creates a haven
>on the WARC bands for non contesters to operate during the disruptive
>activity of some large contests, and otherwise a place for casual operating
>for those who find contest style contacts too short to be satisfying.
> None of us operate every contest. There are always times we want to just
>make a QSO or two without getting into a contest, and that is why we hams
>agreed not to use WARC bands for these activities. For those who don't have
>the experience to know about this, well hopefully you know now. For those
>who do know better, you cannot call the NC TTF an "activity" and by changing
>the words, make it other than a contest. You can't change an elephant by
>calling it a mouse.
> And it is, of course, not relevant that a contest is QRP, even though QRP
>stations generate less QRM by their nature. If we make an exception for QRP,
>we open the floodgates.
>
> Now, I can distinguish a long-term activity like Chuck's casual 30m thing
>because it isn't a concentrated short QSO deal. Nobody is tearing off a
>signal report and quick exchange followed by a TU (TU = "thank you" for the
>non-contesters..) That really isn't a contest, and it doesn't disrupt the
>band.
>
> I am not anti-contest. I work contests. Not all. And when I am not "in
>the contest" I really like having a place to go to operate casually while a
>contest is raging on Please, guys, don't take contests into the WARC bands.
>
>Preston WJ2V
>

Hello Preston WJ2V

Very well said indeed, I agree completely, though I would have been much
less civil in my own words. May I let your words speak for me?

Your whole message, above, should be published. Often!

72, de Art WU2K

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Bob Hightower <ki7mn@dancris.com>
Subject: [7957] NorCal 40A help
Message-ID: <199605011333.GAA02085@dancris.com>

Woe is me, my 40A died the morning of QTTF. Didn't get to make a single contact with
it during the event (though I did on Friday). No audio and no transmit, though I can faintly hear a whisper when I key it.

I went through all the voltage checks and checked for audio with a probe all the way
back to the junction of C13 and X4 in the xtal filter. Could the problem be in the
crystal? From that point on to U1, there is nothing. I replaced U1 with no luck.
When I probe X4, I can faintly hear that. Any suggestions would be appreciated, as
I do like this rig, and would like to get it back on the air.

Please e-mail me direct unless you think the answer would be of general interest.
73,

Bob NorCal #1228, ARCI #8918, Qrp-l #271

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: NYOUNG@desire.wright.edu
Subject: [7983] One Week Left! Time out approaching...
Message-ID: <01I46YPOPZIQ8YGPY0@desire.wright.edu>

Pete Meier ain't kiddin', kids. If you don't attend the banquet,
you'll miss out on a lot of fun, neat company, camaraderie, food,
talk, games, puzzles, levitation, inundation, pontification,
bishops, pawns and low power. So send the money, man! Can't you
hear what Uncle Ren is telling you?

Be there or not... it's your call.

73
Nils
WB8IJN +c

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: bcutter@teal.csn.net (Bob Cutter)
Subject: [7991] QRPTTF Confession
Message-ID: <199605012120.PAA25086@lynx.csn.net>

I sat through the 13 innings it took the Rockies to beat Montreal, in the sun and beautiful weather of Coors Field instead of putting Anvil Points on the air.

72, Bob KI0G
QBF? ZUE

Bob Cutter, ...Glenwood Springs, CO

KI0G

bcutter@teal.csn.net

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: George Dorner <gdorner@kiwi.pyrotechnics.com>
Subject: [7959] QTTF Comments from W9ZSJ
Message-ID: <Pine.LNX.3.91.960501083054.22612C-100000@kiwi.pyrotechnics.com>

QTTF Comments by W9ZSJ

The weather on Friday night in Chicago was freezing, but I set up the station in the trunk of the Honda with the idea that I would beat a fast retreat if my fingers couldn't make the paddles move. After all, my wife was out of town and this was a golden opportunity. I used the same site which the Harper Air Hawks have used for FD since 1981, a hilltop in the trees on the campus of Harper College. This allows a nature view with lots of trees to hang wires on in one direction and a busy intersection of northwest suburban Chicago in the other. The setup was an Argo 509 with a tuner and a wire in the trees. I mounted the keyer and paddles to the bumper with duct tape and sat on a folding chair near the trunk. This allowed my elbow and hand to hang naturally on my knee and was comfortable enough that I may clone this position at home.

The first QSO was on 40 - my only one there in the four hours I operated - and it took about 15 minutes! It must have been the first contest for him, or maybe he wasn't in the contest! He was running one watt and we were both pleased, but I was itchy to get on to more Q's and he wanted to chat.

I moved to 20 and could raise nobody despite some pretty good signals and

repeated calls. Then, when I was in despair, suddenly I had a run of five QSOs in about 10 minutes. Why? Propagation is a funny and nasty thing. There was a lot of noise and crud at my location which is usually vey quiet on Field Day. I heard no station in the middle west and few from the east. As is often the case early in a contest, I had almost as many states as Q's - 12 states, one province, and one DX (UY2LA!) - with only 17 contacts. The "duped" states were CA, CO, and TX. UT and WY were nice to have in there, and the "hardest" contact was VE7CQK just before I had to quit just after noon on Saturday. I left to pick up my wife at O'Hare, hoping to get back for a few more hours. Alas, I forgot a wedding obligation on Saturday evening and other family demands for Sunday, so I only got about four hours in.

This will be a great contest if it gets established.

Congrats to the organizers and promoters.

geo/w9zsj

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Clark Savage Turner WA3JPG <turner@safety.ICS.UCI.EDU>
Subject: [8000] RadShack Headphones
Message-ID: <8623.830997354@safety.ics.uci.edu>

Again.....

First, thanks so much to all for their hints, addresses, etc. for finding Roy. I found him. I am just overwhelmed by the helpfulness of everyone here. I must have gotten 30 replies.

Second, I went to Radio Shack to check out the sale items this week. They have the low end Novus 44 (I think that is the number) on sale for $14.95 or something, normally about $25. They are stereo, nicely padded, cut out noise fairly well, and have good response. Yes, they really bring out the hiss, but I so much appreciate the full ear surround, and the padding, that I will put up with it, or soon make a little filter to cut it out before it hits the phones. The cord is fairly long, and that is convenient in my shack. They have the small stereo jack. I was happy to get them for the price. They work nicely with an adaptor (to larger stereo jack) for my OMNI VI, my Kenmore 440, and without adaptor in my Sierra and NC40.

Clark
WA3JPG

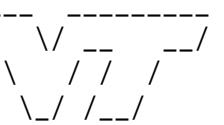
From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: pelt@vt.edu (Randy Pelt)
Subject: [7990] RIT - Pixie2
Message-ID: <v01540b01adad8f085101@[198.82.152.40]>

I've seen lots of discussion over the past several months about the RIT for the Pixie2. Wonder if there is a drawing somewhere I could down load?? Anybody know of one??

Tnx for the help.

72/3

Ranson J. Pelt
pelt@vt.edu
QST de nz4i Semper Fi



From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: dennism@wickham.West.Sun.COM (Dennis Mangrobang [Contractor])
Subject: [7987] Santa Monica QTTF Report
Message-ID: <199605011941.MAA01923@pumice.West.Sun.COM>

QRP to the Field
Santa Monica, CA

KQ6AG, Dennis Mangrobang
WT7F, Terry Wyant

I completed my Wilderness Sierra, band modules for 40M and 20M, and an Oak Hills wattmeter a few days before the contest, and was up until 2AM on contest day, making a delta loop for 40M. I was excited though, and had no problem waking up at 6AM to head over to the TRW ham swap meet (picked up a couple books). Then it was off to the field.

I met Terry (who is the CW/QRP Elmer in my local club, Westside ARC) at

Clover Field Park, which is adjacent to the Santa Monica airport. The park has about a dozen 100 foot high field lights for the baseball diamonds. We picked two which would give a favorable direction for the antenna, and proceeded to shoot a fishing line over the first one, using a slingshot. I had done this sort of thing only a couple of times, but with trees, and figured this would be easy... Two hours, several fishing weights, and two spools of fishing line later, we had the first nylon line over the lights. Guess we should have brought the club antenna elmer along also! The ladder rungs, nuts and bolts, and other objects hanging off the lighting fixture were much more effective at snagging and cutting the line than any tree I had encountered!

So, with only five hours left in the test, we decided to just use one support, and quickly pulled the delta loop up 85 feet. It was fed at the center of the bottom with balanced line to an MFJ tuner/balun. The bottom corners were guyed about 20 degrees from vertical to keep the antenna away from the lighting pole. All this time, we had entertained the popular "what are you doing?", "what is that?" and "how did you get it up there?" questions. We even had a friendly outfielder in the adjacent baseball diamond giving us advice on how to avoid electrocution.

We set the Sierra to 1W (the Oak Hills WM-1 is great!) and began operating, using Terry's callsign, WT7F. We were sitting under a tree, with temps in the mid-70s and a nice view of the airport runway, a baseball game, tennis matches, and attractive women rollerblading, jogging and walking by. I wanted to operate at Venice Beach, but the trees weren't tall enough, and there was a mild breeze so I was worried about getting sand in my new rig (hi hi - I've since read the reports about the sandstorms in Riley). We would just have to rough it out here.

We worked a few calls I recognized from QRP-L, and heard a couple of the group in Riley (especially AB50U who was quite loud) but could not make contact. Terry did most of the operating, and he managed to work HP1AC in Panama. We ended up with 34 QSOs.

Several people stopped by to ask questions. The most popular was "what do you get if you win?". My favorite was "how much does each call cost?". Since most of the equipment is new, it ending up being about $17 per qso; I won't be switching from AT&T any time soon. However, I plan to get the average cost down by make many more contacts in the future!

Claimed score is 34 x 10 (1 watt) x 4 (field) x 3 (homebrew) = 4080

We had an absolutely fantastic time, and are both looking forward to next year. This was my second QRP contest, and the first time I had

ever tried milliwatting, and I look forward to much more of the same.
Thanks to NorCal for a great contest, and for the Sierra design.

72,

Dennis, KQ6AG

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: "DONALD A. COLEMAN (EXT. 2850)" <DACOLEMAN@fair1.fairfield.edu>
Subject: [8006] set qrp-l mail digest
Message-ID: <01I47ISG3A9K8YLV9I@fair1.fairfield.edu>

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: KI6SN@aol.com
Subject: [7981] The Adventure Radio Society
Message-ID: <960501142327_284900153@emout07.mail.aol.com>

HITTING THE TRAIL: THE ADVENTURE RADIO SOCIETY

After more than six months of preparation, we're proud and excited to announce the formation of the Adventure Radio Society, an organization dedicated to promoting the integration of amateur radio and outdoor interests.

Molded from the vision of veteran QRPer Russ Carpenter, AA7QU, of Vida, OR, the organization was developed with the help of Wayne Burdick, N6KR, Belmont, CA, and Richard Fisher, KI6SN, Riverside, CA.

This QRP-L posting marks the birth of the Adventure Radio Society -- May 1, 1996 -- and serves as an invitation for membership to all QRPers who share an enthusiasm for the challenge of portable operation from remarkable locations, and all it entails.

PHILOSOPHICALLY SPEAKING. . .

At its foundation, the Adventure Radio Society strives to:

+ promote physical activity by using human-power -- hiking, biking, canoeing, kayaking, snowshoeing, as examples -- to reach unusual operating sites;
+ promote a sense of adventure by encouraging and celebrating radio operation

from beautiful and remarkable places;
+ support design of radio equipment and antennas for portability in an outdoor environment;
+ enhance emergency communications in the back country, promote operational standardization, and heighten awareness of its intrinsic value;
+ promote an operating ethic based on simplicity, reverence for the environment and adherence to sound amateur practice;
+ create a sense of community among radio amateurs with similar interests and a desire to share their enthusiasm, challenges, knowledge and adventure with others;
+ support and encourage people of all ages -- especially the young -- to experience the combined exhilaration of amateur radio and the great outdoors;
+ offer support, cooperation and good will to other amateur radio organizations.

ARS ACTIVITIES

ARS has been designed to promote a high level of member activity, communication and camaraderie. To that end, three ARS-sponsored programs have been created in conjunction with ARS' launch:

+ Spartan Sprints -- a simple, practical and fun monthly contest in which members and non-members operate portable, lightweight gear they would use during an outdoor, human-powered expedition. While most participants, we suspect, will operate ``virtual expeditions'' from home, sprinting from the field is both welcomed and applauded. Scoring will be based in part on the weight of the gear used. The design and development of lightweight, high-performance radios is among ARS' top technical goals.

+ Worked All States / Portable QRP Award (WAS/PQ) -- giving ARS members an opportunity to achieve recognition for contacting 50 states from portable sites reached by human power. To help chronicle and celebrate their achievement, a specially designed WAS/PQ Expedition Log, Summary Sheet and Award Application will be available to ARS members seeking the award.

+ ARS Piggybacks -- ARS contests operated as ``shells'' around existing contests in which participants are encouraged to compete from challenging locations and to submit logs to both ARS and the existing contest's sponsoring organization. The ARRL's Field Day is an example.

COMMUNICATION

An Internet web site has been created as a clearing house for ARS information, including complete details about WAS/PQ, Spartan Sprints and ARS

Piggybacks, and upcoming activities. It will also serve as a meeting place to view member photographs, read stories from the field, review and gather technical information, and to learn about ARS projects.

We invite and encourage you to take a look:
http://members.aol.com/adradio/index.html

Members' contributions to the site are encouraged and appreciated.

In addition to our web site, QRP-L, QRP club publications and the mainstream amateur radio press will be requested to carry news of ARS activities.

HOW TO JOIN

ARS membership is free and open to all radio amateurs who share in its purpose and philosophy, and entitles members to vote on the society's policies and to participate in all organization activities.

An ARS membership number and certificate will be issued to each new member.

If you're interested in becoming an ARS member, contact Richard Fisher via e-mail at: KI6SN@aol.com

Via U.S. Postal Service, write: 1940 Wetherly St., Riverside, CA 92506

With membership requests, please include your full name, callsign, U.S. Postal Service mailing address and e-mail address.

Your comments and suggestions are encouraged and appreciated.

Vy 72,

Russ Carpenter, AA7QU, Vida, OR
(russ1031@aol.com)

Wayne Burdick, N6KR, Belmont, CA
(burdick@interval.com)

Richard Fisher, KI6SN, Riverside, CA
(KI6SN@aol.com)

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Pete Meier WK8S <pmeier@sun.tir.com>

Subject: [7956] Time's almost up-1 week left!!!!
Message-ID: <31876761.3042@tir.com>

That's right you have just one week left to get that $13 dollar check
and STAMPED SELF ADDRESSED ENVELOPE to:

Pete Meier
4181 Rural
Waterford, MI 48329

OR you will be left out of a wonderful evening of great food, great
talk and great prizes at the premier Dayton Hamvention event......
The Third Annual ARCI QRP Banquet on Friday, May 17, 1995 at 7:00PM
at the Days Inn South in Miamisburg, OH. Just minutes south of Hara
Arena right off I-75.
What you'll be missing is a wonderful meal with choices like Roast
Beef, Baked Chicken, Ham, Special Potatoes, Veggies and more plus
dessert! You'll miss talks from 2 famous QRP personalities and the
chance to win one of many fantastic prizes.

Don't delay any longer SEND THAT CHECK BEFORE IT'S TOO LATE!!!
--
Member of ARRL, ARCI, MI-QRP, G-QRP, NE-QRP, CQC
Pete Meier WK8S QRP-L#212 Email: pmeier@tir.com
Waterford, Michigan USA

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Steve Slavsky <sslavsky@CapAccess.org>
Subject: [7985] Tiny QRP Rigs
Message-ID: <Pine.SUN.3.91-FP.960501144236.26144A@cap1.capaccess.org>

I haven't seen much (if any) mention of the Micronaut transmitters
featured in the current and last issue of CQ. They look intriguing, but
when I called the manufacturer (SESCO), they couldn't answer any
questions about the rig - i.e. - what freq. is the 30M xtal for?, and
told me they just kitted them. None would be available until late May
or early June. I know they're real inexpensive ($15), but I'd like to be
able to use one for real QSOs. According to the CQ article, the 10M xtal
is somewhere about 28.380 or thereabouts - not much chance of working any CW.
Does anyone have any info on these? Sounds like a good group project -
they come in regular or surface mount compenent variety.

Second question - someone mentioned a dual band Pixie (80/40) - are there
any schematics for this anywhere? I have one for 80, but a dual band one
would be fun also.

Each sound like great opportunities for simple milliwatting.

Thanks for your help.

73 & 72,

Steve Slavsky, N4EUK
Reston, VA

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Nick Franco <kf2ph@bnl.gov>
Subject: [7958] TMPS
Message-ID: <3187693F.5B3B@bnl.gov>

Nice morning here on Long Island for day 1 of the famous TMPS. I fired up the NN1G SW-30 in the car and listened around - Nothing! So I called CQ a few times - I even call CQ TMPS but only once since I figured very few would know what I meant and I didn't want anyone accusing me of contesting on 30 meters :-) (sorry I had to do that).

Well, as I was pulling into the 7/11 for some coffee, I heard KD0CA out there. I gave him a couple of calls and he came back to me. That was the only QSO I was able to make on the way in to work. There's always the ride home.... CUL de KF2PH/M QRP

BTW: I just built that LED SWR Indicator from the June '95 QST. It works great. I just have to figure out how to install it into my little W1FB Tuner I built. It does need a 9v battery or 12v feed from somewhere.

KF2PH TMPS 1996 Qs=1 States=1 Confirmed=0 DX=0

IA

72
Nick
--
Nicholas J. Franco <>< BROOKHAVEN NATIONAL LABORATORY
Sr. Systems Specialist RHIC Project - Building 1005 - Room 201

Tel: (516) 344-5467 Fax: (516) 344-3674 UPTON, N.Y. 11973-5000
Email: kf2ph@bnl.gov http://www.rhichome.bnl.gov/People/franco

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Jeffrey Hetherington <jhetheri@freenet.npiec.on.ca>
Subject: [7950] TMPS / 49er
Message-ID: <Pine.SGI.3.91.960501010532.17513A-100000@freenet.npiec.on.ca>

Hi all. I nearly forgot about the start of the TMPS. My 49er arrived today, and I got so tied up with it, that I forgot all about the study until about 0300Z. Turned on the rig and called CQ. First call and I got a response! The first time that has ever happened to me. So after the first evening, 1Q, W0NST, in Colorado. Not a bad start.

Spent the evening re-reading the 49er mods, and searching through a junk box that hasn't seen human life forms for more than 15 years. Probed on by statements such as "I know I had some crystal sockets, keep looking" and such it made for a long night. Tomorrow, the construction begins. Hopefully, I'll be on the air sometime in the afternoon, or early evening.

See Ya!
 Jeff

==========
L. JEFFREY HETHERINGTON
Niagara Falls, Ontario, Canada
VA3JFF TMPS 1996 Qs=001 States=01 Confirmed=00 DXCC=00

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: af852@rgfn.epcc.Edu (William R Colbert)
Subject: [7966] Triton IV
Message-ID: <9605011510.AA18748@rgfn.epcc.Edu>

Kelly, the Triton series transceivers make a very good qrp rig. I have in the past owned the Triton 2, which is similar to the Triton IV (540) with the only difference being the expanded dial calaibration for 10 meters. The receive current draw is about 600 ma (less with the dial lamps off) and is easily converted to qrp by using a short piece of RG-58 or 174 with a female RCA on one end and a male RCA on the other

to bypass the amplifier stage, going straight from the driver board
to the filter and out. Gives an adjustable power from less than one
to about 5 watts out. The only thing that did not work after the mod
was the SWR/pwr out indicator on the meter. So if you can obtain either
the Triton 2 (520) or the Triton IV (540-analog, 544 digital), you will
have a very good, albeit large, qrp rig. There was some mod info years
back on placing the Triton series on 30 meters - I do not have that info
handy, but perhaps someone on the list will. Good luck and hope this is
helpful. 72/73 Ray

--
Ray Colbert, W5XE/V31XE, El Paso, Tx

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Steven Wilson <randyw@crl.com>
Subject: [7979] Wanted source of CB transceiver boards
Message-ID: <Pine.SUN.3.91.960501104701.16095A-100000@crl14.crl.com>

Since our next favorite hobby is digging in junk boxes at all of the
local electronic houses I bet one of us here on the list knows where
there is a bunch of old 23 ch CB radio PC board assemblies. I would like
to work up a modification for a QRP 12 meter transceiver using one of
these. They normally contain 3 crystals and a PLL-02A IC. They were
CYBERNET boards made in Japan by the 10's of thousands.

If you know of a source please e-mail an address, name or phone number.

Thanks de stan ak0b

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: N0oct@aol.com
Subject: [7970] WARC, etc., trivia.....
Message-ID: <960501123716_482137290@emout19.mail.aol.com>

In a message dated 96-05-01 09:59:00 EDT, you write:

>What's to prevent other, bigger contests from so-called trespass on the WARC
>bands? The rules committees. ARRL isn't going to open WARC to Sweepstakes.
>CQ isn't going to open World Wide to WARC. If the freq's aren't good for
>points, then the contesters won't go there. It's NOT politeness, it's
>strategy.

Here is an interesting piece of trivia. During the 1991, 1992 and 1993 ARRL

Field Day Events [contests?], *ALL* bands were open to radio amateurs, except 30 meters [some may want to check FD prior to '91--that is as far as my meager QSTs go back].

Field Day 1994 was the first time that ARRL specifically prohibited FD activity on 18, 12 and 30 meters together. Interesting that the other WARC bands have been subject to contesting *ahem*, I mean national emergency preparedness exercises %^)

Not intending to muddy the waters or get off the QRP track, just an interesting fact.

ObQRP--
Has anybody besides some of the ops in the SLQS done any work with 100 ohm shielded twinax [belden 9207, if memory serves me correctly]? It's good stuff, but I am interested in others' opinions and use for it.

TTFN, 72, 73, HIKE!

jim n0oct

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Clark Savage Turner WA3JPG <turner@safety.ICS.UCI.EDU>
Subject: [7949] Where is Roy, W6EMT?
Message-ID: <25413.830926817@safety.ics.uci.edu>

Hello All -

Anyone know how to contact Roy G., W6EMT, of the NW 8020 fame?
I have a friend who would like to build one and needs to
get in touch with Roy.

Clark
WA3JPG

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Mike Cloud <cloudm@mhsgate.meth-mem.org>
Subject: [7955] X
Message-ID: <191B873101172C16@mhsgate.meth-mem.org>

Ok qrp fans. I keep hearing about "desert storm surplus solar arrays". No one in the mid-south (yes, there are people

living in those woods you fly over when going from the east to the west coast and back again at 35000 ft, hi hi) seems to
know anything about these solar panels. Any information, ANYONE can provide me would help to back-fill the pit of
ignorance in this area. tnxs in advance de Mike, KR4IT

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: mizrahi@svlhp8.scs.philips.com
Subject: [7982] Re: 40-9er filters
Message-ID: <9605011824.AA20926@svln20.scs.philips.com>

Chuck,

The filters you mentioned have been developed from theory but
seem reliable to implement.
The 470-1.5-470 was implemented and tested by Alan Kaul.
I simulated the 470-1.2-470 and it is inferior!
Oddly enough, the 5-element "back-to-back" filter works better
with 1.2uH...
I usually do not rely on a point solution and run some sensitivity
analysis. It's not complete for the 1300-0.68-1300 but looks
very good so far.
The other filters you mentioned have a very high insertion loss
for the fundamental, and that's one criteria that should be
applied. Actually, the more accurate aspect to consider is the
overall final stage efficiency, including the filter. The filter
can have low insertion loss but poor matching characteristics,
try a straight wire in the 40-9er...
Any filter is a compromise. The filters above seem in the right
ballpark for insertion loss and matching, and thus make sense
to review their harmonics attenuation performance.
I am very confident that the 1300-0.68-1300 (or somewhat similar)
is a better solution for a third order filter, compared to the
original and other filters suggested for the 40-9er, achieving
both efficiency and harmonics attenuation and being reasonably
tolerant to component and source impedance variations.
Like anything in life, the final proof is the "real thing".
If you don't want to be first, that's fine... Alan Kaul is working
on the test results and those will be available soon.
You're absolutely right asking if the filters suggested stand any
chance of performing well in the actual circuit.
I can only attest to the ones above. All were preceded by some
considerable analysis and computer simulations (filter program
and SPICE), including sensitivities, and were (or soon will be)
tested in the lab.
I think we should all thank Mike WA8MCQ for sharing his excellent

work with everybody here and Alan W6RCL for the "legwork" on
the filters and other mods.
I know Mike and Alan only through the e-mails and this forum
but I feel that we all share the enthusiasm of making good things
better. That is one great thing that qrp-l contributes to most
readers, I believe, the ability to share ideas and experiences
and achieve better results. It can be all done by one person, but
then it may take forever and will probably show in a lower level
of refinement.
Is this what they call a club project or what?!

73 DE ORI AC6AN

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: mack@mails.imed.com
Subject: [7986] Re:Brad's comments on Zack's comments on Chuck's comment
Message-ID: <9604018309.AA830984582@mails.imed.com>

Brad must have misunderstood what Zack meant when he said that using
square wave drive would minimize the second harmonic.

Brad is quite correct that a square wave *envelope* on the signal will
create a harsh sounding signal with key clicks.

What Zack was referring to is the waveform of the RF inside of the
envelope. The closer a RF signal is to a 50% duty cycle square wave
the smaller the even harmonics are.

I found it *REALLY* interesting while teaching a EET class on
communications and looking at the output of the "square wave" signal
out of the Wavetek generator on the spectrum analyser. Sure enough
all of the even harmonics were there, but they were all roughly the
same level and about 20 to 30 db below the 3rd harmonic.

Said another way, Zack is right that striving for a 50% duty cycle
drive will greatly reduce the even harmonics.

Ray Mack
WD5IFS
mack@mails.imed.com
Friendswood (Houston), TX

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: myers@bigboy73.West.Sun.COM (Dana Myers)
Subject: [7971] Re: Cheap 2M CW/SSB - some progress
Message-ID: <199605011648.JAA04800@sunspot.West.Sun.COM>

> From: Brian Cieslak <bcieslak@merge.com>
>
> I posted a message a few days ago requesting info on converting a MFJ or
> Ramsey 2M receiver kit to receive SSB or CW too. Here's what I found so far,
> not much but food for thought.
>
> The MFJ kit uses the motorola MC13135 FM receiver on a chip. It has two LO's and
> mixer that feed a limiter and a detector for FM reception. There is a pin
> that allows you to tap into the signal before it gets conditioned for FM
> demodulation (Limiter and Detector). I suspect you should beable to feed the
> signal at this point to an NE602 set up as a BFO to get SSB and CW out (or
> AM for that matter).

Yup, you can tap into the output of the 455KHz filter that preceeds the
limiter/demodulator - I'd suggest using a FET source follower to avoid
loading the filter down.

> Am I on the right track hardware guru's (Wayne, Chuck)? If so, Can someone
> teach me how to design an NE602 as a BFO stage say around 455 KHz.

Actually, a BFO+product detector is nothing more than a DC receiver at
the IF, so it follows that any DC receiver kit modified to operate at
455KHz would be suitable. However, keep in mind that the IF selectivity
in an FM receiver is quite wide, so it won't be any different than using
a DC receiver on 2m. You won't have any opposite sideband rejection,
etc. . Receivers with BFOs have enough selectivity at the IF before
the product detector to avoid this. The tightest inexpensive 455KHz
filter is stil 6KHz wide, which is OK for AM but doesn't help SSB
at all. I recall there are some SSB filters at 455KHz but they're
big and expensive. You *could* convert the 455KHz IF down to something
where DSP is practical (say 10 or 20KHz?) but this would be pretty
challenging all the way around.

So, assuming you're willing to settle for DC receiver performance,
there's still the issue of AGC. FM receivers usually run wide open,
with no AGC loop (afterall, they have limiter in the IF), but for
AM and SSB you'll want AGC. You can derive an AGC control voltage
at the 455KHz IF or at the output of the product detector, but you'll
need to modify an earlier amplifier stage for an AGC input.

Have a look at _Solid State Design for the Radio Amateur_ (ARRL)
for general ideas and specific layout of AGC, and also for
information on designing Colpitts oscillators, which is what

you need to know to work with the NE602 oscillator.

Dana

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: George Dobbs <g3rjv@gqrp.demon.co.uk>
Subject: [8002] Re: G-QRP/Sprat Info
Message-ID: <ISUZMDAMP+hxEw0$@gqrp.demon.co.uk>

In message <199605011740.KAA10317@dfw-ix6.ix.netcom.com>, "H. Hoover III
" <w6zh@ix.netcom.com> writes
>Greetings all:
>
> For those that are members of the G-QRP Club (and those that are
>not, you should be) and have questions about your Sprat subscription,
>you can contact the subscription meister, Dave Aizlewood, G4WZV, at
>101746.3113@compuserve.com .
>
>de Pete, W6ZH, QRPL #257

Thanks Pete........
.....................and save G3RJV a lot of extra work!!
72/3
>

George Dobbs G3RJV "It is vain to do with more
The G QRP Club what can be done with less"
g3rjv@gqrp.demon.co.uk William of Occum (1290-1350

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Larry East <LVE1@inel.gov>
Subject: [7968] RE: LED Indicators for tuners?
Message-ID: <2.2.16.19960501162342.1bc7eba8@garnet.inel.gov>

>
>I seem to remember an article that used LEDs as indicators for for/rev
>power. Does anyone know where this might have appeared?
>
In QST, last April or May I believe.

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [7975] RE: LED Indicators for tuners?
Message-ID: <199605011730.RAA04196@chuck.dallas.sgi.com>

Gang,

Article in June 1995 QST, page 40 and 41 by Tony Brock-Fisher, K1KP,
"Build a Super-Simple SWR Indicator". It looks to be a simple SWR
bridge with a couple of op amps driving two LEDs for relative indicators
instead of meters.

I brought it to the office this morning to make a copy to mail out.

Interesting start to article is the fact that they built this as a
companion to the NE40-40 rig of Dave Benson's as a club project.
:-)

dit dit
--
Chuck Adams (K5FO CP-60) adams@sgi.com
K5FO TMPS 1996 Qs=004 States=04 Confirmed=00 DX=00
CO AZ MI SD

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Allen Jones <ajones@adsnet.com>
Subject: [7978] Re: LED Metering (request)
Message-ID: <199605011727.MAA16745@alice.adsnet.com>

At 07:58 PM 4/30/96 -0700, you wrote:
>Well now that many of you have helped me find the QST issue (thank you)
>in which the LED swr metering was described (June 95 p. 40), is there one
>of you who would mind snailing me a copy? Please?
>
>
I printed a copy from the new ARRL periodicals CD-ROM. It's on its' way to
Grover via snail.

73 de Allen, K9DZE
ajones@adsnet.com
==========
Allen Jones K9DZE ajones@adsnet.com

Michigan City, Indiana EN61nq
ARCI G-QRP NorCal QRP-L #112
==========

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: PA3ASC@mailbox.hol.nl (Mike Perry)
Subject: [7984] Re: More 30M Contesting
Message-ID: <199605011843.UAA27557@bonny.hol.nl>

Hi gang.
The position is quite clear over here in PA-land.
Our licence conditions forbid contesting on 30 m.
--
Regards,
Mike Perry. [e-mail :- PA3ASC@mailbox.hol.nl]
=-=--=-=--=-=-=-=-=--=--=--=-=-=-=-=-=-=--=-=-=-=

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: "N1OOQ Tom R. @ MRO1 01-May-1996 1014" <randolph@est.ENET.dec.com>
Subject: [7964] re: More 40-9er filter talk
Message-ID: <9605011427.AA23176@us4rmc.pko.dec.com>

> For some reason, DeMaw seems enamored of the Butterworth designs in
> some of his articles. They do give beautifully smooth passband

Yep, for a few reasons... Butterworth give a nice flat passband. They're
easy to tune, because tuning for minimum insertion loss at the center of
the passband is pretty much all you have to do. They have in/out impedances
which are a fair match to 50 ohms (or whatever you designed them for). They
are relatively insensitive to component tolerance.

If you need: sharp cutoff, very smooth broadband impedance match, flat time
delay vs freq., then there are better filters.

==========
Tom Randolph N1OOQ NE-QRP 419 QRP-L 87 ARRL randolph@est.enet.dec.com
==========

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Bill Acito <acito@ultranet.com>

Subject: [8001] RE: NE QRP AField Sept. 21, 1996, A Theme ??
Message-ID: <01BB37A6.657E5EA0@acito.ultranet.com>

On Wednesday, May 01, 1996 7:38 PM, JayMiller@aol.com wrote:
|Dear Fellow QRP Enthusists,
|
| For the NorCal "QRP To The Field", '96, the theme was "Ghost Towns" or
|"Historical Places", for the NorCal "QRP To The Field", '97, the suggested
|theme is "Alledged UFO Crash & Landing Sites, or other strange or mystical
|places" (Most of California qualifies in one or both of those categories,
|anyone who can elect Feinstein to Office is strange, but I am off the subject
| ;-))
| So, what if we had a theme, for the Sept. 21, 1996 New England QRP AField
|event ? Now what does New England have, besides Kennedy's, Socialism,
|Liberals, & Taxes, that would be fun ? I will toss this out for open
|discussion (thread) to those on the QRP-L. I have a few ideas, but I don't
|want to bias the thread. Since most of the Members, in the New England QRP
|Club, are from New England, let's hear from 'all-y'all, oops, excuse me,
|Youse Guys. Let's put the dater (data) enroot (enroute elsewhere in the USA)
|to the QRP-L. This Reflector thread is open for discussion. Geez, if this
|were the Nevada QRP Club, it would prairie dogs & bordellos, except in Clark
|County, Nevada.
|
|
| Remember, it has to be FUN. Monte is the Nevada QRP Club chartered yet ?
| :-)
|
| 72...Jay, WA5WHN (Wind
|blasted)
| Albuquerque, New
|Mexico, USA.
|
|
|
|
|
|

How 'bout from lighthouses?

:-)

 Bill Acito mail via acito@asdg.enet.dec.com Hudson, MA
 KC1GS .:. qrp-ne .:. qrp-arci .:. norcal .:. arrl life .:.

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Roger Hightower <aa7qy@dancris.com>
Subject: [8003] Re: NE QRP AField Sept. 21, 1996, A Theme ??
Message-ID: <31881E5F.4B81@dancris.com>

Bill Acito wrote:

>
> How 'bout from lighthouses?
>
> :-)Find a lighthouse in AZ, CO or NM and it's an automatic win, :-)

72/73, de Roger AA7QY
--

NorCal 1099 CoQRP 176 QRP-L 62 G-QRP 9081 ARCI 8946 NE-QRP 383

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [8004] Re: NE QRP AField Sept. 21, 1996, A Theme ??
Message-ID: <Pine.SOL.3.91.960501224342.13377F-100000@utkux4.utcc.utk.edu>

On Wed, 1 May 1996, Roger Hightower wrote:

> Bill Acito wrote:
>
> >
> > How 'bout from lighthouses?
> >
> > :-)Find a lighthouse in AZ, CO or NM and it's an automatic win, :-)
>
> 72/73, de Roger AA7QY
> --
>
> NorCal 1099 CoQRP 176 QRP-L 62 G-QRP 9081 ARCI 8946 NE-QRP 383
>
>
A forest ranger fire tower will do in a pinch.

LB

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Bob Hightower <ki7mn@dancris.com>
Subject: [8005] Re: NE QRP AField Sept. 21, 1996, A Theme ??
Message-ID: <199605020302.UAA08762@dancris.com>

At 07:30 PM 5/1/96 -0700, you wrote:
>Bill Acito wrote:
>
>>
>> How 'bout from lighthouses?
>>
>> :-)Find a lighthouse in AZ, CO or NM and it's an automatic win, :-)
>
>72/73, de Roger AA7QY
>--
Well, we could find an old Army Heliograph station....that'd work.
73,

Bob NorCal #1228, ARCI #8918, Qrp-l #271

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Paul Harden <pharden@aoc.nrao.edu>
Subject: [8007] RE: NE QRP AField Sept. 21, 1996, A Theme ??
Message-ID: <199605020306.VAA25329@zia.aoc.nrao.edu>

Bill,
Now you recommended lighthouses just to pick on us out here in the
desert with no water and now an official 3 year drought - didn't you?

Actually, I like the idea. Just have to figure out what in New
Mexico comes the closest to a lighthouse? Hmmm. Would a windmill
qualify? Speaking of wind, did I mention ...

Paul NA5N
(Seriously, neat idea)

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Pat Taber <ptaber@logicraft.com>
Subject: [7960] Re: No contesting on WARC bands, please
Message-ID: <199605011354.JAA132606@nss2.CC.Lehigh.EDU>

>Alan, 30m has been a "no trespassing" zone for contesters since its creation.
> It is no excuse to trespass that the property looked attractive to you.

30M is excluded even from Field Day because there is a requirement that hams not interfere with the existing services there. That's why there's a power cap. If you bring the power down to 5 watts, QRM to the existing stations that are primary is unlikely.

However, I strongly disagree that there is "trespass" involved here. Contesters have the same rights to the frequency as any other ham. Although the people who wish it were so claim there is a gentleman's agreement involved, there is not. The sole reason WARC bands are not involved in contests is they are left off the list of frequencies allowed in a given contest. That is done by contest rules committees, not by the general ham population. In this case, there was a contest rules committee that decided to allow 30M operation and I applaud it.

What's to prevent other, bigger contests from so-called trespass on the WARC bands? The rules committees. ARRL isn't going to open WARC to Sweepstakes. CQ isn't going to open World Wide to WARC. If the freq's aren't good for points, then the contesters won't go there. It's NOT politeness, it's strategy.

>>>==>PStJTT

==========
Patrick Taber Email: ptaber@logicraft.com
Principal Software Engineer Phone: (603) 880-0300
Logicraft Information Services Fax: (603) 880-7229
22 Cotton Road
Nashua N.H. 03063
KC1TD TMPS 1996 Qs=000 States=00 Confirmed=00 DX=00

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: WJ4PRandy@aol.com
Subject: [7993] Re: OHR400 front panel power mod
Message-ID: <960501184848_482340475@emout13.mail.aol.com>

Jeff, et al,

I didn't have any instability with my power control at any freq or pwr level. Since you didnt describe the problem with any details, I cant begin to help. What symptoms do you see?

73, Randy WJ4P

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Pat Taber <ptaber@logicraft.com>
Subject: [7962] Re: QRP to the Field Rules & 30M
Message-ID: <199605011429.KAA63936@nss2.CC.Lehigh.EDU>

> Lets get off the subject and back to neat things, like operating
>reports, 49er mods, Dayton Weather, the new products that are going to
>be at Dayton. Arguing and backbiting and negative posts do nothing to
>promote the hobby. Let's get back in a positive mode.

I must have missed the negative, backbiting posts. I thought everyone was
stating their opinions and allowing others to express theirs. (As is usual
on QRP-L) Did I miss something juicy?

>>>==>PStJTT

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Patrick Taber Email: ptaber@logicraft.com
Principal Software Engineer Phone: (603) 880-0300
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KC1TD TMPS 1996 Qs=000 States=00 Confirmed=00 DX=00

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: GREGOIRE@ENDOR.COM (ERNEST GREGOIRE)
Subject: [7994] Re: QRP to the Field Rules & 30M
Message-ID: <199605012303.TAA52413@nss2.CC.Lehigh.EDU>

 NorCal did not
>envision that people would read that to mean that they could operate on
>the WARC bands. That was a mistake, but an honest one. We have learned
>and next year we will certainly correct it. But guys, we did NOT intend
>for there to be activity on the WARC bands.
>
> Arguing and backbiting and negative posts do nothing to
>promote the hobby. Let's get back in a positive mode.
> HE is a volunteer, and HE did not intend to
>promote activity on WARC bands. 72, Doug
>KI6DS

Hooray for you Doug!!!

You are a ray of light at what is hopefully
the "End of the 30 meter Tunnel".

Very well said OM, TNX es 73

de AA1IK N.E.-QRP-C. # 202 (Lead by example, It is better to)
 QRP-L member #95. (pull a string than it is to push it.)
Ernie Gregoire
RR 1 Box 221
Canaan, NH. 03741

New England QRP Club, information
available on request by sending me a
 S.A.S.E. or via E-mail.

e-mail : GREGOIRE@ENDOR.COM
packet : AA1IK@WA1WOK.FN43FE.NH.USA

From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: "Dr. Art Epstein" <ArtEpstein@wnis.com>
Subject: [7998] Re: QRP++,racks up freq.flyer miles
Message-ID: <199605012345.TAA03256@wnis.com>

On Mon, 29 Apr 1996 GREGOIRE@ENDOR.COM (ERNEST GREGOIRE) writes:

> I was disapointed with the ++ upgrade when it first arrived. I suppose this
> kind of thing can happen in shipping too, shipping companies being required
> by law to hire gorillas to bounce test all packages marked "Fragile".
>
> Index did make good on it's commintment for a new 1 year additional
> warantee.
>
> So there you have it. I havent read much here about the satiafaction level
> regarding the upgrade to QRP++ here on the reflector. Any comments?

I just got my upgraded QRP++ back yesterday. After some of the
negative comments about thr rig here on the list I was a bit nervous.
 I really loved the original and had phenomenal results with it (like
62 countries in the CQWW CW DX contest in a bit over 6 hours).

I'm pleased to report that the "New QRP+" is far better than the old

model. The AGC does pump a bit with VERY strong sigs but it's IMHO
a minor problem. The keyer is perfect and the SSB compression is
super. I ventured on SSB and was told by an S51 that the audio was
phenomenal and so punchy that I was able to override a sig that was
10db stronger. Got a 59 report to boot.

Art WB2WMJ
==========
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From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: Pat Taber <ptaber@logicraft.com>
Subject: [7974] Re: WARC, etc., trivia.....
Message-ID: <199605011709.NAA62920@nss2.CC.Lehigh.EDU>

>Field Day 1994 was the first time that ARRL specifically prohibited FD
>activity on 18, 12 and 30 meters together. Interesting that the other WARC
>bands have been subject to contesting *ahem*, I mean national emergency
>preparedness exercises %^)

I have to admit, I didn't note the change. But I tend to camp on 15 (my
favorite band) and work most of FD there.

Taking an aside to an aside, most people laugh up their sleeve when they say
Field Day isn't a contest, but in truth, although we've made it competitive,
it's not a contest. And it is just as important to prove you could set up a
field site for WARC bands as any other when talking disaster drill. (My
theory is that the drill isn't so much learning to "pass traffic" as it is
to keep the portable/emergency stuff near the top of the pile that hams
accumulate.)

30M has always been the exception because of the non-QRM requirement.

>>>==>PStJTT

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From owner-qrp-l@Lehigh.EDU Wed May 1 22:41:10 1996
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>
Subject: [7988] Re: WARC, etc., trivia.....
Message-ID: <Roam.3.0.830971376.23674.myers@bigboy>

Pat Taber wrote:

> Taking an aside to an aside, most people laugh up their sleeve when they say
> Field Day isn't a contest, but in truth, although we've made it competitive,
> it's not a contest. And it is just as important to prove you could set up a
> field site for WARC bands as any other when talking disaster drill. (My
> theory is that the drill isn't so much learning to "pass traffic" as it is
> to keep the portable/emergency stuff near the top of the pile that hams
> accumulate.)

It is a little ironic that Field Day, an emergency preparedness exercise,
is usually planned for at least 6 months in advance ;-). It would be a
lot more interesting to have Field Day take place on a different summer
weekend every year, announced 24 hours in advance by the ARRL. This
would really test the emergency preparedness aspect, though it wouldn't
do much for the public relations part ;-).

Dana
Dana.Myers@West.Sun.Com